APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,920	07/18/2000	Waiman Chan	POU920000092US1	8929

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EXAMINER
BANANKHAH, MAJID A

ART UNIT	PAPER NUMBER
2127	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n N . 09/618,920	Applicant(s) CHAN ET AL.
	Examiner Majid A Banankhah	Art Unit 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 September 2003_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-4_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-4_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)	4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6)☐ Other: .

1.   This final office action is in response to application filed on July 18, 2000, Claims 1-4 are

considered for examination.

2.   The text of those sections of Title 35 U.S. code not included in this office action can be

found in a prior office action.

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

Claim 1, recites the limitation "said requested resource as to type and quantity" in line 10-

11. There is insufficient antecedent basis for this limitation in the claim. Additionally, the claim

is indefinite, it is unclear whether the level associated with the resource is same as type or type of

resource is different from resource level.

Claims 2-4 are rejected for the rejection of their parent claim.

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section
> 122(b), by another filed in the United States before the invention by the applicant for
> patent or (2) a patent granted on an application for patent by another filed in the United

States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones by (U.S.

Pat. No. 6,282,561, hereinafter Jones).

Per claims 1, and 4, a method for managing resources in a data processing system, said

method comprising (See Jones Abstract), resource management):

Defining to multiprocessors in said data processing system (See abstract, single machine

or at least one resource, **together with a quantity associated with that resource** (col. 7, lines

37-50, Once the activity determines what resources it needs and **the quantity of those resources**

it needs, the activity sends a request for the determined quantities of resources to local resource

planner to obtain a reservation (step 34, and 36 in FIG. 2). The request that is submitted by the

activity holds a "resource set).

said quantity being indicative of resource capacity (col. 9, lines 52-62, As can be seen above, the

IResource interface includes a Total Amount( ) method that allows the resource planner 62 to

determine the **total amount or capacity of the resource in the resource specific units**), said

resource having a level selected from the group consisting of hardware level resources, operating

system level resources and application level resources (col. 5, lines 2-10, The resource planner

may manage multiple resources, and the resources it manages may be of different types. The set

of resources managed by the resource planner may change over time). It must be pointed out that

the specific of the type of resource is inherent from the statement in col. 5, lines 2-10 (and the

resource it manage may be of different type). Additionally, Jones teaches of hardware, and

software resource as tow different types of resource (A "resource", as used herein, refers to a

limited hardware or software quantity that is provided by a machine, See, col. 4, lines 35-36).

determining whether **an application level user has requested use of said at least one**

resource (col. 7, lines 22-36, the user requests a read operation, the operating system 18 may

provide a mechanism for determining the appropriate resource requirements for such an

operation);

determining availability among said multiple processors of said requested resource as to

type and quantity (See, The resource planner may manage multiple resources, and **the resources**

it manages may be of different types col.7, lines 22-36, Another alternative is for the system to

record what resources are utilized during a read and cache those values so that the values are

returned to the activity for use in making a resource reservation request); and

dispatching a user job which requests said resource upon the condition that said resource

is available in the type and quantity requested (col. 8, lines (col. 19-23, to figure out what

amount of a set of resources must become available to satisfy a request).

Regarding the limitation of user supplied command statement, in claim 4, the system of

Jones inherently teaches of command statement (col.7, lines 22-36, the user requests a read

operation, also see col. 8, lines 10, GetAmount [command], get the amount of particular

resource).

Per claim 2, the method of claim 1 in which said hardware level resources are selected

from the group consisting of CPUs and random access memory (See Jones, col. 4, lines 35-47, A

"resource," as used herein, refers to a limited hardware or software quantity that is provided by a

machine. Examples of resources include CPU time, memory capacity, I/O bus bandwidth,

network bandwidth, and devices, such as video frame buffers and sound cards. Resources may

also encompass higher level software-defined resources that manage other resources).

Per claim 3, in which said operating system level resource is virtual memory (col. 6, lines

10-34, that it must call upon the **SCSI disk resource provider 52 and the I/O bus resource**

provider 54 to perform the disk read operation). Note that the Virtual memory is also called

Disk memory, therefore, the disk resource is same as Virtual Memory.

5.   Applicant in his remarks on page 5, argue by substance:

"**In particular, it is seen that in applicants' claimed invention, a customer or user is provided**

with interfaces which allow that customer to control, modify, interact, and request resources

not just at an administrative level but also at the operating system level and even deeper at

the hardware level"

In response it is submitted that first, there is no recitation of 'control', ''modify', and/or

'interaction' of customer or user with the resource. Claim 1, in lines 10-11, recite; "determining

availability among said multiple processors of **said requested resource as to type and quantity**". Therefore, in simple terms, the requested resource, which is not, indicated who that might be, request certain type of resource for certain amount, and this is taught by Jones. Jones in col. 1, lines 66-68, continued on col. 2, lines 1-11, teach "request is received at the resource planner from a first program to reserve a first share of a selected one of the resources. A request from a second program to reserve a second share of the selected resource is received at the resource planner". In this statement 'share' is related to the capacity, and 'selected' is related to the type of the resource. Even though applicant by deleting 'type of resource' amended the claims to draw a different meaning from the 'level of resource', but resource level is still interpreted as 'resource type' from the claim. Additionally, Jones also teaches of user request for certain amount and type of request (See, Jones in col. 7, lines 22-37, For example, if the user requests a read operation, the operating system 18 may provide a mechanism for determining the appropriate resource requirements for such an operation).

Later applicant on page 6, the paragraph before the last partial paragraph, argue: **"The teachings found in the patent to Jones et al. do not distinguish the treatment to be made for a resource request depending upon the level involved. In this regard, the Examiner's particular attention is directed to applicants' Figure 1 and to page 6, lines 20-23 ...".**

In response it is submitted that in Fig.1 the resources are of different type and that's what the reference of Jones teaching. In Jones, it is the resource planner that determines the amount and type of the particular resource requested (See, Fig. 7A, element 88, "Activity requests re-negotiation with resource planner"). In other words, it is the planner that categorizes the resources based on their type.

Applicant on page 7, argue:

" Accordingly, it is seen that in applicants' claimed invention, application programs of the users are able to address requests for resources all the way down to the hardware level. This is not in any sense taught, disclosed, or even suggested by the teachings found in the patent to Jones et al. In stark contrast as evidenced by the quotation from Jones et al. above, it is their teaching that application level requests should not be made for the purpose of requesting or allocating resources at the operating system or even at the hardware level. Accordingly, it is seen that the teachings of Jones et al. are in fact inapposite to those found in applicants' claims and specification".

In response, first, in the art of computer Operating System, any user request is at application level. Secondly, in claim 1, lines 5-7, the claim recite, "said resource having a level selected from the group consisting of hardware level, operating system level, and application level". Therefore, the level associated with the resource indicate the type of 'hardware, 'operating system', and/or 'application' of the resource. Jones teaches of different types of resource in his invention as well.

Additionally, the quotation from Jones is the evidence that user application programs are able to address requests down to hardware level, and therefore renders the applicant's claim obvious. Jones motivation is to overcome prior art's limitation and it is based on the prior arts teaching, i.e. conventional resource management systems.

> On page 8, applicant argue :
"Secondly, Jones et al. fail to teach, disclose, or suggest the utilization of requests that are treated differently depending upon whether or not those requests are directed to a hardware level, an operating system level, or to an administrative level. Lastly, it is noted that Jones et al. fail to teach, disclose, or suggest the notion that a resource request may float amongst several processors in a multiprocessor data system so as to be essentially satisfiable by any one of the processors. ".

In response, it is noted that, applicant is trying to put words into the claims without actually doing so. There is no recitation of treating the requests differently in any of the claims. There is no recitation or notion of any 'resource request may float amongst several processors'. Applicant newly amended claim recite a multiprocessing system in the preamble of claim 1 and this is taught by Jones in Fig. 3 (See, element # 56 [network], and the explicit recitation of set of machines in the Abstract).

6.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

7.   Applicant's amendment (deletion of Type of resource) necessitated the new ground of rejection (section 3, second paragraph of 112 rejection). THIS ACTION IS MADE

FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R.
§ 1.136(a).

    A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION
IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE
EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE
OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL
AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN
THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE
ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R.
§ 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE The application
has been amended as follows:
ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE
EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL

8.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to **Maijd A. Banankhah** whose voice telephone number is **(703)
308-6903**. A voice mail service is also available at this number.

    All response sent to U.S. Mail should be mailed to:

**Commissioner of Patent and Trademarks
Washington, D.C. 20231**

    **Hand-delivered responses should be brought to Crystal Park Two, 2021 Crystal
Drive, Arlington. VA, Six Floor (Receptionist).** All hand-delivered responses will be handled
and entered by the docketing personnel. Please do not hand deliver responses to the Examiner.

    **All Formal or Official Faxes must be signed and sent to either (703) 308-9051 or
(703) 308-9052**. Official faxes will be handled and entered by the docketing personnel. The date
of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday,
or a Federal Holiday within the District of Columbia, in which case the official date of receipt
will be the next business day. The application file will be promptly forwarded to the Examiner
unless the application file must be sent to another area of the office, e.g., Finance Division for
fee charging, etc.

    Any inquiry of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is **(703) 305-9600.**

Maijd Banankhah

12/11/03

MAJID A. BANANKHAH
PRIMARY EXAMINER